



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,953	06/14/2001	Noboru Endo	520.36259CX1	6534
24956 7590 01/07/2008 MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			EXAMINER HOM, SHICK C	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 01/07/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/879,953

Applicant(s)

ENDO ET AL.

Examiner

Shick C. Horn

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2007 and 29 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/4/07 has been entered.

***Response to Arguments***

2. Applicant's arguments filed 10/29/07 have been fully considered but they are not persuasive.

In response to applicant's argument in page 3 lines 13-25, that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the step of converting the VCI value based on the combination of the destination/source IP address and the port number in TCP or UDP and the step of multiplexing the VCIs into a single VPI so as to transmit a plurality of flows via a single

VPI) are not clearly recited in the rejected claims; the claims merely recite the step of allocating IP address and port number to a VCI. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Claim Rejections - 35 USC § 112***

3. Claims 13-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13 line 15-16 and claim 15 lines 14-15 which recite "wherein all IP packets are transmitted, not according to the VCI, but according to a Virtual Path Identifier (VPI) of the VP in an ATM network," and as argued in page 4 lines 1-3 of the response, is not clear because page 21 lines 1-15 recite that in the IP packet transfer process, the transit flow management table is retrieved using the destination IP address, source IP address and port number to check whether the table has a matching content and if a matching content is detected in the table, both the VPI and VCI are read out and used to set the ATM

header, and send the created internal cells to the ATM switch and therefore not all IP packets are transmitted according to the VPI as claimed.

Claims 14 and 16-17 are rejected under 35 U.S.C. 112, second paragraph because they depend from rejected claims 13 and 15, respectively.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in

order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feldman et al. (6,148,000) in view of Laubach et al. (6,028,860).

Regarding claims 13 and 15:

Feldman et al. disclose the method of switching IP (Internet Protocol) packets at a packet switching system, comprising the steps of:

allocating a pair including an IP address and a port number in Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) to a Virtual Channel Identifier (VCI) (col. 2 line 66 to col. 3 line 17 recite assigning unique VCI to each nodes using the IP address as the unique VCI value and col. 16 lines 22-29 recite allocating channel VC, i.e. port number, to VCI); and

outputting IP packets whose headers have the IP address and the port number via a Virtual Connection (VC) corresponding to the VCI when the packet switching system receives the IP packets, wherein if IP packet headers have a certain part

identical with previously input IP packets, then the allocated VCI is the same as a VCI allocated to the previously input IP packets, wherein if the certain part of the IP packet headers is different from the previously input IP packets, then the allocated VCI is an idle VCI (col. 16 lines 21-35 recite allocating the VC label, previously learned and col. 11 lines 9-30 recite allocating new VCI, i.e. idle VCI, to new path, i.e. path which is different from the previous path), and

wherein the VC is included in a Virtual Path VP (col. 16 lines 45-59 recite the VC being within each VP, i.e. VP being bundle of VC).

Regarding claims 14, 16-17:

Feldman et al. disclose wherein the information is a port number in Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) and wherein the IP address is a pair of source IP address and destination IP address (see col. 22 lines 49-55 which recite use of TCP protocol and VC including source and destination addresses).

Feldman et al. disclose all the subject matter of the claimed invention with the exception of wherein all IP packets are transmitted, not according to the VCI, but according to a

Virtual Path Identifier (VPI) of the VP in an ATM network as in claims 13 and 15.

Laubach et al. from the same or similar fields of endeavor teach that it is known to provide wherein all IP packets are transmitted, not according to the VCI, but according to a Virtual Path Identifier (VPI) of the VP in an ATM network (Fig. 17 and col. 20 line 65 to col. 21 line 26 recite the use of the VPI for denoting transmission mode such as broadcast mode or multicast mode, i.e. IP packet mode, clearly reads on IP packets being transmitted according to VPI in an ATM network).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide wherein all IP packets are transmitted, not according to the VCI, but according to a Virtual Path Identifier (VPI) of the VP in an ATM network as taught by Laubach et al. in the communications method of Feldman et al.

All IP packets being transmitted, not according to the VCI, but according to a Virtual Path Identifier (VPI) of the VP in an ATM network can be implemented by providing the step of transmitting all IP packets using the VPI in the ATM network of Laubach et al. in the cell transmission of Feldman et al. The motivation for providing all IP packets are transmitted, not



according to the VCI, but according to a Virtual Path Identifier (VPI) of the VP in an ATM network as taught by Laubach et al. in the communication method of Feldman et al. being that it provides more efficiency for the system since the system can better distinguish IP packets from other ATM cells at the receiving end.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sakagawa et al. disclose an apparatus and method for transferring a packet flow in a communication network.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pham Chi can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control  
Number: 09/879,953  
Art Unit: 2616

Page 9

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SH

SH

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER

1/4/08